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EXAMINER
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ART UNIT	PAPER NUMBER
2128	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/513,855	ARITA ET AL.	
	Examiner	Art Unit	
	Sunray Chang	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2000*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>5</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1 – 53 are presented for examination.

Claims 1 – 53 are rejected.

Drawings

2.   *This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.*

Specification

3.   The disclosure is objected to because of some informalities:

For example, the following items are not understood: "In the technique for displaying speedily art object, as methods to reduce the loads, simplifying the object body, or neglecting some parts which are not seen in displaying are mainly used. On the other hand, as a technique that finds easily an observing point, there are techniques like control for sections to be displayed or not be displayed, or a transparency control of section or a section displaying. By using these techniques, the relation of position between the arranged complex bodies or parts hidden by a cover or a case can be observed, so that the object body can be effectively investigated" (Page 2, Line 1 – 5).

For further example: "a set displaying plane is defined by the user designating a depth of the position." (Page 2, Line 12 – 13)

Yet another example: "Certainly, in the prior art, there is a function that generates the section at the point designated by in the three-dimensional space. But it

generates only the two-dimensional section, but has not the function displaying the

three-dimensional section" (Page 3, Line 1 – 3).

Applicant is required to submit an amendment which clarifies the disclosure so

that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure

(i.e., matter which is not supported by the disclosure as originally filed).

4.   A substitute specification in proper idiomatic English and in compliance with 37

CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied

by a statement that it contains no new matter, and a marked up copy showing the

alterations.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
set forth the best mode contemplated by the inventor of carrying out his invention.

5.   **Claims 1 – 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to**

comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one

skilled in the art to which it pertains, or with which it is most nearly connected, to

make and/or use the invention.

6.   Specifically, independent claims include limitations drawn to management

means, implementing means and up-dating means. But the specification does not

disclose the methodology for actually managing, implementing or updating the

displaying of a body section in three-dimensional space by a computer. No algorithms,

techniques or flow charts are disclosed. While the specification on page 11, for

example, makes reference to, management unit, implementing unit, and updating unit. It

does not disclose specifically how to perform management, implement, and update.

Applicant's specification appears to be drawn entirely to procedures of displaying a

body section using three-dimensional CAD, and storing a program for realizing the

device. Applicants have not disclosed specifically how information is managed by three-

dimensional CAD tool, how to generate one section using management data and

displaying the section on the display screen, or how to update managed information.

Such that one skilled in the art could make and/or use the claimed invention without

undue experimentation. Dependent claims inherit this defect.

Further, independent claims include limitations drawn to generate a three

dimensional section of the body cut by the set displaying plane according to the

management data of the management means. But the specification does not disclose

the methodology for actually disclosing the "set displaying plane according to the

management data of the management means". No algorithms, techniques or flow charts

are disclosed. While the specification on page 11, for example, makes reference to, the

implementing unit 12 manages and generates a section of a body in the three-

dimensional space cut by the set displaying plane according to the management data of

the management unit. It does not disclose specifically how to perform a "set displaying

plane", Applicant's specification appears to be drawn entirely to procedures of

displaying a body section using three-dimensional CAD, and storing a program for

realizing the device. Applicants have not disclosed specifically how to generate the "set

displaying plane" using three-dimensional CAD tool. Such that one skilled in the art

could make and/or use the claimed invention without undue experimentation.

Dependent claims inherit this defect.

7.   **Claims 1 – 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to
comply with the written description requirement. The claim(s) contains subject
matter which was not described in the specification in such a way as to
reasonably convey to one skilled in the relevant art that the inventor(s), at the
time the application was filed, had possession of the claimed invention.**

8.   Specifically, independent claims include limitations drawn to management

means, implementing means and up-dating means. But the specification does not

disclose the methodology for actually managing, implementing or updating the

displaying of a body section in three-dimensional space by a computer. No algorithms,

techniques or flow charts are disclosed. While the specification on page 11, for

example, makes discloses to, management unit, implementing unit, and updating unit. It

does not disclose specifically how to perform management, implement, and update.

Applicant's specification appears to be drawn entirely to procedures of displaying a body section using three-dimensional CAD, and storing a program for realizing the device. Applicants have not disclosed specifically how information are managed by three-dimensional CAD tool, how to generate one section using management data and displaying the section on the display screen, or how to update managed information. Accordingly, a skilled artisan would not know how to make and/or use the claimed invention from the written description contained in the specification. Dependent claims inherit this defect.

Independent claims include limitations drawn to generate a three dimensional section of the body cut by the set displaying plane according to the management data of the management means. But the specification does not disclose the methodology for actually disclosing the "set displaying plane according to the management data of the management means". No algorithms, techniques or flow charts are disclosed. While the specification on page 11, for example, makes discloses to, the implementing unit 12 manages and generates a section of a body in the three-dimensional space cut by the set displaying plane according to the management data of the management unit. It does not disclose specifically how to perform a "set displaying plane", Applicant's specification appears to be drawn entirely to procedures of displaying a body section using three-dimensional CAD, and storing a program for realizing the device. Applicants have not disclosed specifically how to generate the "set displaying plane" using three-dimensional CAD tool. Accordingly, a skilled artisan would not know how to make

and/or use the claimed invention from the written description contained in the

specification. Dependent claims inherit this defect.

The examiner notes that applicant's specification contains "means for" language

which does not provide enablement for the claim citations of claims 1,2, 9 – 11, 13 – 15,

and 17 – 19.

Claims 6 and 29 are rejected for negative limitation included. Examiner notes

that independent claims 2 and 25 recite "for displaying the three - dimensional section

with the set displaying plane on the display screen;" and claims 6 and 29 recite "when

the three-dimensions section is not displayed." Claiming any negative limitation or

exclusionary proviso must have basis in the original disclosure. If alternative elements

are positively recited in the specification, they may be explicitly excluded in the claims.

See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the]

specification, having described the whole, necessarily described the part remaining.").

See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453

(Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

9.   The terms "set displaying information", "operating plate" and "updating means" in

claims 2, 3, 25 and 26 are vague and indefinite. Because the terms " set displaying

information " and "operating plate " are not defined by the claim, the specification does

not provide a standard for ascertaining the requisite degree, and one of ordinary skill in

the art would not be reasonably apprised of the scope of the invention. There is no

further explanation for "set displaying information" and "operating plate".

10.   *The examiner asserts that the limitation of claims 6 and 29 relating to "for*

displaying the three-dimensional section with the set displaying plane *on the display*

screen;" and claims 6 and 29 recite "when the three-dimensions section is not

displayed" *create a negative limitation with respect to the independent claims.*

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11.   The following rejections are advanced against the claims as best interpreted.

Regarding independent claims

12.   **Claims 1 – 53 are rejected under 35 U.S.C. 102(b) as being anticipated by**

AutoCAD (AutoCAD User's Guide, AutoDesk Dec 5th, 1997).

13.   Regarding independent claims 1 and 24, AutoCAD teaches management means

(creating, editing, attaching, Page 438 – 439) for managing attribute information of parts

(extracts information from the drawing, Page 441, Line 4) and arranging information

(orders given by the template file, Page 441, Line 8) of a set displaying plane for making

a body section defined based on a plane of one of a parts (3D drawing with front and

back clipping planes, Page 532, Figs); implementing means for generating a

three-dimensional section of the body cut by the set displaying plane according to the

management data of the management means (The previous illustration shows a datum

reference frame verifying the dimensions of the part, tertiary datum plane, secondary

datum plane, Primary datum plane, Page 426, Line 1, Fig.), and for displaying the three

dimension section with the set displaying plane on the display screen (Spherical

Projection warps the texture both horizontally and vertically. The top edge of the texture

map is compressed to a point at the "north pole" of the sphere, as is the bottom edge at

the "south pole", Page 614, Line 1 – 3); and up-date means (editing attributes, Page

440, Line 1) for up-dating the arranged information (edit attributes, Page 440, Line 2)

managed by the management means (creating, editing, attaching, Page 438 – 439) by

corresponding to the transfer or rotation (Rotating in 3D, Page 554, Line 5) of the set

displaying plane (rotate a 3D object about an axis, Page 554, Line 11).

14.   Regarding independent claims 2 and 25, AutoCAD teaches management means

(creating, editing, attaching, Page 438 – 439) for managing attribute information of parts

(extracts information from the drawing, Page 441, Line 4) and one or plural kinds of

attribute information (extracts information from the drawing, Page 441, Line 4) of set

displaying plane for making a body section with the relation between the parts and the

set displaying information (Spherical Projection warps the texture both horizontally and

vertically. The top edge of the texture map is compressed to a point at the "north pole"

of the sphere, as is the bottom edge at the "south pole", Page 614, Line 1 – 3);

implementing means for generating a three-dimensional section of the body cut by the

set displaying plane according to the management data of the management means

(The previous illustration shows a datum reference frame verifying the dimensions of

the part, tertiary datum plane, secondary datum plane, Primary datum plane, Page 426,

Line 1, Fig.), and for displaying the three dimension section with the set displaying plane

on the display screen (Spherical Projection warps the texture both horizontally and

vertically. The top edge of the texture map is compressed to a point at the "north pole"

of the sphere, as is the bottom edge at the "south pole", Page 614, Line 1 – 3); and

up-date means (editing attributes, Page 440, Line 1) for up-dating the arranged

information (edit attributes, Page 440, Line 2) managed by the management means

(creating, editing, attaching, Page 438 – 439) by corresponding to the transfer or

rotation (Rotating in 3D, Page 554, Line 5) of the set displaying plane (rotate a 3D

object about an axis, Page 554, Line 11).

15.   Regarding independent claims 22 and 23, AutoCAD teaches managing

management data (creating attributes, editing attributes, attaching attributes, Page 438

– 439) of one or plural set displaying planes (Spherical Projection warps the texture

both horizontally and vertically. The top edge of the texture map is compressed to a

point at the "north pole" of the sphere, as is the bottom edge at the "south pole", Page

614, Line 1 – 3) for cutting the body to make the section and of the attribute information

of parts (3D drawing with front and back clipping planes, Page 532, Figs) and of set

displaying planes with the relation information with the parts and set displaying plane,

which are made by the same data structure (The previous illustration shows a datum

reference frame verifying the dimensions of the part, tertiary datum plane, secondary

datum plane, Primary datum plane, Page 426, Line 1, Fig.); registering the management

data (create a template file, Page 441, Line 2); displaying the section and set displaying

plane with the relation information (3D drawing with front and back clipping planes,

Page 532, Figs); and up-dating the section made by the set displaying plane (edit

attributes, Page 440, Line 2) corresponding to the designation of transfer or rotation

(Rotating in 3D, Page 554, Line 5) of the set displaying plane (rotate a 3D object about

an axis, Page 554, Line 11) with considering the relation information.

16.   Regarding independent claims 45, 48 and 51, AutoCAD teaches a management

unit (creating attributes, editing attributes, attaching attributes, Page 438 – 439)

managing set displaying planes for cutting the body into sections (3D drawing with front

and back clipping planes, Page 532, Figs); and an implementing unit generating a

three-dimensional section of the body cut by the set displaying planes (To set the

clipping planes, Page 532, Line 2), and displaying the section with the set displaying

plane on a display screen (DVIEW to create either a parallel projection or a perspective view, Page 529, Line 12).

17.   **Claims 1, 2, 22 – 25, 45, 48 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Cragun (U.S. Patent No. 5,771,044).**

18.   Regarding independent claims 1, 2, 22 – 25, 45, 48 and 51, Cragun teaches techniques and means for managing, implementing and up-dating displaying plane angles.

For example, at Col. 1, Line 20 - 31, Cragun recites implementing means (Col. 1, Line 22, draw and design), display (Col. 1, Line 22, computer screen), three dimensions (Col. 1, Line 22), management means (Col. 1, Line 25, store the part in the memory), managing attribute information (Col. 1, Line 25, store the part in the memory), up-date means (Col. 1, Line 29, spin the part), transfer or rotation (Col. 1, Line 29, spin the part), set displaying plane (Col. 1, Line 30, check the part from various angles). For example, Col. 1, Line 20 – 31, recites:

"In recent years computer software and computer hardware has been developed which allow an Engineer or Draftsman to **draw and design** a part in **three dimensions** on a **computer screen**. This has eliminated much of the paper system and streamlined the design process overall. For example, now an Engineer or Designer can **store the part in the memory** of a computer or on a disk outside a computer. In addition, a designed part can also be sent electronically from one Engineer to another to see if certain design criteria are met or to approve a drawing. Also, a designer can **spin the part** on a computer screen to **check the part from various angles** which eases inspection of the drawings."

Regarding dependent claims

19.   Regarding dependent claims 3 and 26, AutoCAD teaches implementing means

(view menu, Page 532, Line 2) displays an operating plate (3D Dynamic View, Page

532, Line 3) for operating the set displaying plane corresponding (clipping planes, Page

532, Line 1).

20.   Regarding dependent claims 4 and 27, AutoCAD teaches a sign board (DVIEW

prompt, Page 532, Line 9) corresponding to the set displaying plane (clipping planes,

Page 532, Line 10) and containing character strings (entering a value, Page 532, Line

10) for distinguishing the set displaying plane (for distance from the target, Page 532,

Line 11) and containing a relation between the set displaying pale, if there is the relation

(dragging the slider bar, Page 532, Line 10).

21.   Regarding dependent claims 5 and 28, AutoCAD teaches implementing means

(view menu, Page 532, Line 2) displays the set displaying plane (clipping planes, Page

532, Line 10) with the frame of the set displaying plane (clip front/back dash edge, Up

Fig., Page 532).

22.   Regarding dependent claims 6 and 29, AutoCAD teaches the implementing

means (view menu, Page 532, Line 2) displays the set displaying plane (clipping planes,

Page 532, Line 10) with a transparent color (transparent, Up Fig., Page 532), when the

three-dimensions section is not displayed.

23.   Regarding dependent claims 7 and 30, AutoCAD teaches implementing means

(view menu, Page 532, Line 2) displays the set displaying planes (clipping planes, Page

532, Line 10) with the same transparent color (transparent, Up Fig., Page 532), when

the relation information is defined between the set planes (+2 ~ –2, Up Fig., Page 532).

24.   Regarding dependent claims 8 and 31, AutoCAD teaches the up-date means

(Modify menu, Page 554, Line 12) updates the child information (3D operation, Page

554, Line 12) with the parent information (the object, Page 554, Line 13) according to

the change of the parent information (the object, Page 554, Line 13), when the relation

between the parent and child is defined (specify start point and endpoint, Page 554,

Line 14); the implementing means transfers or rotates (rotate 3D, Page 554, Line 12)

the child plane (3rd Fig, Page 554) corresponding to the transfer or rotate (rotate 3D,

Page 554, Line 12) of the parent plane (1st Fig, Page 554).

25.   Regarding dependent claims 9 and 32, AutoCAD teaches edit means (Modify

menu, Page 554, Line 12) for editing the relation information (3D operation, Page 554,

Line 12) displayed on the screen by user interfacing with the screen (paper space view,

Fig., Page 476).

26.   Regarding dependent claims 10 and 33, AutoCAD teaches generating means

(view menu/3D Dynamic view, Page 532, Line 2) for generating a new set displaying

plane (clipping planes, Page 532, Line 10) according to a request (choose, Page 532,

Line 3) for generating a set displaying plane (clipping planes, Page 532, Line 10) issued

with a designation of a plane (objects, Page 532, Line 4) of one of the parts (Upper Fig.,

Page 532) by making the relation with the parts (Upper Fig., Page 532), or for

generating a new set displaying plane (clipping planes, Page 532, Line 10) according to

a request (choose, Page 532, Line 3) for generating a set displaying plane (clipping

planes, Page 532, Line 10) issued with a designation of a registered plane (objects,

Page 532, Line 4) by making the relation (Upper Fig., Page 532) with the registered

plane (objects, Page 532, Line 4).

27.   Regarding dependent claims 11 and 34, AutoCAD teaches second generating

means (view menu/3D Dynamic view, Page 532, Line 2) for generating a new setting

displaying plane (clipping planes, Page 532, Line 10) containing a specific point by

linking with the set displaying plane or the set displaying plane generated just before

from a specific point contained in the designated set displaying plane and parts

(dragging the slider bar or entering a value for distance from the target, Page 532, Line

10).

28.   Regarding dependent claims 12 and 35, AutoCAD teaches third generating

means (view menu/3D Dynamic view, Page 532, Line 2) generating a new set

displaying (clipping planes, Page 532, Line 10) by tracing path information set on a

designated set displaying plane (clipping planes, Page 532, Line 10) from the path

information, while making a relation information with the set displaying plane (dragging

the slider bar or entering a value for distance from the target, Page 532, Line 10).

29.   Regarding dependent claims 13 and 36, AutoCAD teaches fourth generating

means (view menu/3D Dynamic view, Page 532, Line 2) for generating a new set

displaying plane (clipping planes, Page 532, Line 10) by moving continuously (dragging

the slider bar, Page 532, Line 10) the designated set displaying plane (clipping planes,

Page 532, Line 10), by linking with the set displaying plane or the set displaying plane

generated just before from a specific point contained in the designated set displaying

plane and parts (entering a value for distance from the target, Page 532, Line 10).

30.   Regarding dependent claims 14 and 37, AutoCAD teaches existing range setting

(entering a value for distance from the target, Page 532, Line 10) means for setting an

allowable range of existence (entering a value for distance from the target, Page 532,

Line 10) of the set displaying plane (clipping planes, Page 532, Line 10) for a set

displaying plane (clipping planes, Page 532, Line 10).

31.   Regarding dependent claims 15 and 38, AutoCAD teaches section direction

setting means (setting a viewing direction, Page 526, Line 5) for setting the section

direction of a body (set a viewing direction, Page 526, Line 5) to the set display plane

(clipping planes, Page 532, Line 10).

32.   Regarding dependent claims 16 and 39, AutoCAD teaches the setting direction

setting means (setting a viewing direction, Page 526, Line 5) sets the cutting direction of

the body (set a viewing direction, Page 526, Line 5) depending to the existing position of

the set displaying plane (clipping planes, Page 532, Line 10).

33.   Regarding dependent claims 17 and 40, AutoCAD teaches arranging means for

arranging additional parts (pyramid, Square, Upper Fig., Page 532) or arranging a

region (+2 ~ +4 and –2 ~ -4, Upper Fig., Page 532) on the set displaying plane (clipping

planes, Page 532, Line 10).

34.   Regarding dependent claims 18 and 41, AutoCAD teaches check means

(selecting objects, Page 228, Line 16) for checking an interference (passes through,

Page 231, Line 11) between one or plural of parts (all the objects, Page 231, Line 11),

which move (remove, Page 234, Line 24) with the set displaying plane (rectangular

selection area, Page 230, Line 2), and another parts (upper Fig., Page 230).

35.   Regarding dependent claims 19 and 42, AutoCAD teaches deciding means

(viewpoint presets, upper Fig., Page 527) for deciding, whether the two-dimensional

section and the three dimensional section (Fig.'s, Page 527) are controlled with linkage

or no-linkage, when the deciding means decides the linkage control, the implementing

means (view menu, Page 532, Line 2) generates the two-dimensional section of the

body cut (clip, Page 532, Line 7) by the set displaying plane (clipping planes, Page 532,

Line 10) for generating the three-dimensional section (3D Dynamic View, Page 532,

Line 3), when the deciding means decides no-linkage control, the implementing means

(view menu, Page 532, Line 2) generates the two-dimensional section cut (clip, Page

532, Line 7) by a set display plane (plan view, Page 528, Line 10) selected from the set

displaying planes (clipping planes, Page 532, Line 10), and displays the

two-dimensional section (XY plane, Page 527, Line 3) on the same screen displaying

the three-dimensional section (angle in the XY plane, Page 527, lower Fig.)

36.   Regarding dependent claims 20 and 43, AutoCAD teaches the implementing

means (view menu, Page 532, Line 2) displays the two-dimensions (XY plane, Page

527, Line 3), showing the corresponding a part of the three-dimensional section (Fig.'s,

Page 527).

37.   Regarding dependent claims 21 and 44, AutoCAD teaches the implementing

means (view menu, Page 532, Line 2) displays the two-dimensional section and the

three-dimensional section (Fig.'s, Page 527), showing a position of a designated

viewpoint (XY plane, Page 527, Line 3).

38.   Regarding dependent claims 46, 47, 49, 50, 52, and 53, AutoCAD teaches an

up-date unit (Modify menu, Page 554, Line 12) up-dating a position (viewpoint, Page

529, Line 8) and direction (angle, Page 530, Line 13) of the set displaying plane

(clipping planes, Page 532, Line 10) making the section corresponding to the

transfer-rotation of the set displaying plane (Viewpoint Presets, Page 527, Upper Fig.).

Conclusion

39.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. **Ryals** et al. (U.S. Patent No. 5,803,914) discloses acquisition,

processing and display of image data, means for displaying. **Wason** (U.S. Patent No.

5,751,927) discloses shifts of the points, creating a display, three-dimensional

coordinate display space, modifies the view, means for modifying the view shifts, the

angle of the change, front/nodal plane, means for rendering the view thereon and

means for creating a display on the surface of a perceptible three-dimensional

coordinate display space, means which modifies the view. **Watanabe** et al. (U.S.

Patent No. 5,701,403) discloses building section, 3D data management section, 3D

display section, data input by user. **Tata** et al. (U.S. Patent No. 5,596,504) discloses

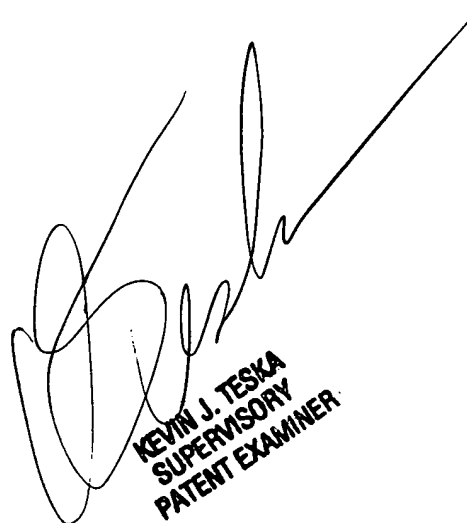sliced plane, stores the data, rotation.

40.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sunray Chang. Whose telephone number is 703-305-

8744. The examiner can normally be reached on M-F 7:00-4:30. If attempts to reach

the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska

can be reached on 703-305-9704. The fax phone number for the organization where

this application or proceeding is assigned is 703-746-3506. Any inquiry of a general

nature or relating to the status of this application or proceeding should be directed to the

receptionist whose telephone number is 703-305-6833.

Sunray Chang
Patent Examiner
Group Art Unit 2128
Technology Center 2100
U.S. Patent and Trademark Office

March 21, 2004